

REMARKS

Claims 1-9, 11-16 and 18-22 are now pending in the application. Claim 23 has been previously withdrawn. Claims 10 and 17 are now cancelled. Claims 1, 19, and 20 are amended.

Claim rejections-35 U.S.C. § 103

In the Office Action dated September 7, 2007, claims 1-21 have been rejected under 35 U.S.C. §103(a) as being obvious over the combined teachings of Burnham (US 6,841,515), Burnham *et al.* (US 5,853,450), Kimura (US 5,093,262) and Blais (CA 2332187). Firstly, even though the Examiner specifically mentioned that claims 1-21 are rejected under 35 U.S.C. §103(a) on page 2 of the Office action, because it is stated in the Office Action Summary that claims 1-22 are rejected, the Applicant is under the presumption that the 35 U.S.C. §103(a) rejection also applies to claim 22.

The Examiner specifically mentioned that:

*“The Applicants argue in the responses and declaration that the prior art cited does not teach or suggest that the ferment (containing the bacteria) is obtained from a fermentation stopped and that bacteria are unencapsulated. The Examiner argues that the claims do not recite that the bacteria are unencapsulated. Particularly, Burham *et al.* ‘450 and Kimura ‘262 explicitly do not teach the bacteria (ferment) being encapsulated...”* [emphasis added].

In this regard, Applicant wishes to submit that claim 1 has been amended to define that the ferment is sprayed onto the granular fertilizer. Support can be found throughout the application, and for example in Example I. Claims 10 and 17 have been deleted in order to avoid any redundancy. By specifying that the ferment is sprayed onto the granular fertilizer, a person skilled in the art would acknowledge that not only is the present application not directed to an

encapsulated bacteria, but on the contrary, once the bacteria are sprayed on the fertilizer, they are ready to resume their growth and/or activity upon application and there is no control or limitation on their activation. The present application is claiming a fertilizer wherein the bacteria are active immediately, i.e. readily available and without a lag time (see paragraphs [0038]-[0039]). The bacteria once sprayed on the fertilizer are ready to resume their growth and/or activity upon application and their release is not controlled by the presence of a layer or an encapsulation. The present application is claiming bacteria which, once sprayed on the fertilizer, are ready to resume their growth and/or activity upon application and there is no control or limitation on their activation as taught by Burnham.

On the contrary, the document of Burnham (US '515) teaches a method of production of encapsulated and/or concentrically-constructed fertilizer. The document of Burnham (US '515) teaches that micro-organisms are included in one or more layers of the granule (see column 2 lines 25-46 in Burnham). Even though Burnham (US '515) mentions in column 4 and 6 that the biosolids can be encapsulated, it is clear from the text recited at column 4, lines 38-49 that homogenous granules are not ideal for biosolid treatment. Burnham (US '515) specifically teaches that homogenous granules have a problem which consists in that they tend to react with water, oxygen and other substances during storage. Thus, the invention disclosed in Burnham (US '515) presents a solution to the mentioned problem which is a method that allows controlled release of the active contents. A person skilled in the art would acknowledge that in order to control the release of the active ingredients, a granule needs not to be homogenous but needs to include at least one layer. **Consequently, even though Burnham (US '515) mentions in column 4 and 6 that the biosolids can be encapsulated, the description is teaching away from the possibility of producing a granule without encapsulation and is not enabling for such**

unencapsulated granule. Such granule without encapsulation would not allow controlled release of the active contents. Clearly, the granules produced following the method of Burnham (US '515) needs to have at least one layer so as to overcome the drawbacks of the prior art identified therein. Doing otherwise would defeat the invention disclosed in Burnham (US '515) and this is not permitted under the law. A proposed modification that changes the principle of operating of a reference cannot support a conclusion of advisers. In re Ratti, 270 F.2d 810,80 (CCPA 1959). Further, the Applicant wishes to reiterate that the objective of the encapsulation of the outer layer taught in Burnham is to allow a control on the release of the active contents and not to allow immediate activation of the bacteria, without lag time. It is clearly stated in column 4, lines 56-60 of Burnham that *"Accordingly, the inventors realized great improvement to the art of biosolid use may be obtained by 1) limiting exposure and activation of active substances in the biosolid during storage, and 2) control of biosolid disintegration during use..."* [emphasis added]. It is contradictory that the Examiner is construing the teaching of Burnham to encompass biosolids not encapsulated when such biosolids will not have all the advantages taught and desired by the invention disclosed in Burnham.

In addition, Applicant wishes to also resubmit that the present application is claiming a method for producing a fertilizer or a fertilizer produced by said method wherein the ferment is used at a rate of at most 3 liters of ferment per ton of fertilizer. As mentioned on page 6 of the present application, spraying the fertilizer at a higher rate will cause the fertilizer to partly solubilize, liberating nitrogen concentrated at the surface of the fertilizer, in the vicinity of the bacteria, which is toxic to the bacteria in such concentrated micro-environment. Consequently, a person skilled in the art with the teaching of the present application would recognize that dissolving the fertilizer in greater volume would cause toxicity to the bacteria and kill them. In

addition, as supported by the Declaration from Dr. Alexandre Blais filed March 6, 2008, when the fertilizer of the present invention is used at a rate of more than 3 liters of ferment per ton of fertilizer, the fertilizer agglomerates. Dehydration of the fertilizer disclosed in the present application allows not only to prevent agglomeration at a lower volume of use but also to prevent cellular damage caused to the bacteria. On the contrary, Burnham ('515) is teaching granules having water (see column 8 in Burnham, lines 1-6).

Nowhere in Burnham ('515) is there any teaching or even suggestion of the subject matter presented hereinabove and claimed in the present application. Thus, it is believed that there is no incentive in Burnham ('515) that will lead a person skilled in the art to obtain the present invention, or to combine the teaching of Burnham ('515) with that of Burnham *et al.* (US 5,853,450), Kimura (US 5,093,262) and Blais (CA 2332187), in order to obtain the present invention. The references of Burnham *et al.* (US 5,853,450), Kimura (US 5,093,262) and/or Blais (CA 2332187) do not teach or even suggest the elements that are not described in Burnham ('515) as discussed hereinabove and in the previous responses submitted March 8, 2008, September 28 and December 6, 2007. More specifically, the references of Burnham *et al.* (US 5,853,450), Kimura (US 5,093,262) and Blais (CA 2332187) do not teach or even suggest a method for producing a fertilizer or a fertilizer produced by said method wherein the ferment is used at a rate of at most 3 liters of ferment per ton of fertilizer or that fermentation needs to be stopped before bacteria get into a dormant stage, which will prevent the bacteria to have a lag time upon re-hydration. In view of the amendments and arguments presented hereinabove, it is submitted that none of the references cited, taken alone or in combination, render the claims obvious and reconsideration of Examiner's rejections under 35 U.S.C. §103(a), is earnestly requested.

It is submitted, therefore, that the claims are now in condition for allowance. Reconsideration of the Examiner's rejections is respectfully requested. Allowance of claims 1-9, 11-16 and 18-22 at an early date is solicited.

In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

Should any fee deficiencies be associated with this submission, the Commissioner is authorized to debit such deficiencies to the Nixon Peabody Deposit Account No. 50-0850. Any overpayments should be credited to said Deposit Account.

Respectfully submitted,

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